

CATS



The Official Journal of the Capital Area Timex/Sinclair Users Group

Presidential Ramblings

OKTOBERFEST for CATS now less than three weeks away (as this is written) and once again it is hoped that we shall have a good turnout to celebrate the TENTH Year of our CATS' life with many more to come. Despite the ups and downs of the SINCLAIR line of computers, they manage to hang on: onto their faithful owners and users.

In fact, some new life has been breathed into the "top-of-the-line" QL, primarily in Europe, over the past few years with mouse, Gold Card, Minerva, keyboard interfaces, hard disc and interface, plus other items in the hardware line. There is word that Miracle Systems will launch a QOne this year. Let us hope that this will be a step forward if not a Quantum2 Leap.

On the software side, there always seems to be something new coming out, emulators, newer word processors, and all sorts of goodies.

On the publishing side, there have been some drop-out newsletters (the result of thinking that George will do it?), but as Ruth eloquently described in last month's issue, there is a lot of information still available for all the Sinclair machines. Hardware, software, and more. We are still exchanging with about twelve newsletters, all of which are available for perusal by members at our regular meetings.

As for the PEOPLE side, they are still very much involved. The DAYTON

TIMEX/SINCLAIR USERS GROUP had again arranged for an area reserved for use by Sinclair user groups and vendors at the August 1992 Computerfest put on by THE DAYTON MICROCOMPUTER ASSOCIATION. Four or five tables were in evidence manned by stalwarts from Milwaukee, Indianapolis, Dayton, and Chicago and a perusal of the sign-in book showed Pennsylvania, Canada, Virginia, and others I can't bring to mind. (Good reason to buy a Z-88 for note-taking?) Technical intercourse among these diverse persons was not restricted to hours during which the fest was open, but continued on into Saturday night during an impromptu group dinner and later at a couple of motel rooms. Lots of info floating around.

Now, I quote John Vanags (Editor QUANTA) editorial in the September issue, "The summer months always seem to be very quiet on the computer front no matter which machine you have." How prescient of him to provide the reason for the "LACK OF ARTICLES FOR THE NEWSLETTER". C'mon, gang, cough up.

Good news department. We have been in touch with Tom Bent, our GURU of yore and he will be present at the anniversary meeting on 10 October. Unfortunately, he will not be at our picnic. He has also promised to put on a program at a date to be agreed on in 1993. It should be a doozy.

HAPPY ANNIVERSARY TO ALL.

From The Editor:

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With last months newsletter we had plenty of submitted articles to fill a complete issue (12 pages). This month submissions have decreased. The membership roster does help to fill things out, but everyone still needs to help in putting material in to the newsletter.

We have not received many articles from out-of-town members. I don't know if they are members of other groups and subscribe to a number of newsletters, or if we are thier only source of Sinclair info. I would like to see more input from our out-of-town members. Even doing two newsletters, I still find time to write articles for other Sinclair publicattions.

Now that I've done my monthly begging, and since I have put a few articles in this issue, I don't have much else to say. Hope to see you at the 10th anniversary meeting. If my friends grapes (in NY) don't rippen on that weekend, I will be at the meeting. I've volunteered to go up and help him pick his grapes.

Happy Hacking,

Key Dates

10 October: CATS Meeting
11:00 Workshop
1:30 Executive Board Meeting
2:00 General Meeting

27 October: Newsletter Deadline
For the Next Issue

14 November : CATS Meeting

It's here! The Sinclair event of the Decade!!

Don't miss the

Gala 10th Anniversary Celebration

of the

Capital Area Timex/Sinclair (CATS) Users Group

2 p.m.

Saturday, October 10, 1992

New Carrollton Library

Featuring:

Old-timers' panel

New-timers' panel

**Emulator--Extricator software from
the Netherlands**

Programmer's Punch

Z-80 Cake

Chocolate chip chips

Sinclair Grand Concours

This is only the beginning!

Plan to be there !!

Immediate Past President
 Newsletter Editor & Contact Person
 Duane Parker
 Tim Swenson
 (703)820-6657

President
 1st Vice President
 2nd Vice President
 Recording Secretary
 Corresponding Secretary
 Treasurer
 Members-at-Large
 Joe Miller
 Barry Washington
 Open
 Open
 Hank Dickson
 Mannie Quintero

Executive Board

The Capital Area Timex/Sinclair
 Users Group is a not-for-profit group
 devoted to serving the interests of those who
 own, use, or are interested in the Timex/
 Sinclair family of computers.

CATS BBS: (301) 588-0579. 8-N-1. 300/1200
 baud. News and general information, 24
 hours a day.

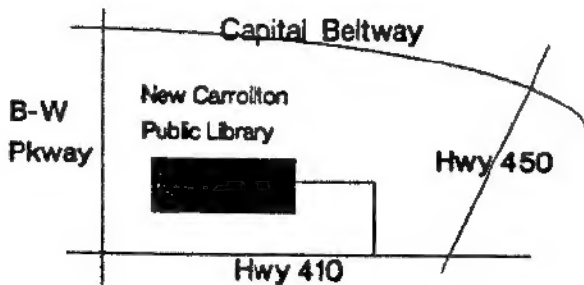
Timex SIG on CompuServe: Wednesday
 night, 10:00 PM Eastern time (GO CLUB).
 Networks

per year.
 outside the Washington Metro area and is \$12
 subscription is available for persons living
 libraries, group buys, etc.). A newsletter only
 months, and include all privileges (access to
 Memberships cost \$15 per year, are good for 12
 Newsletter

Meetings
 Monthly meetings are held from 11:00 AM to
 4:30 PM, on the second Saturday of each
 month, at the New Carrollton Public Library.

CATS Newsletter
 P.O. Box 11017
 Takoma Park, MD 20913

FIRST CLASS MAIL



The next meeting of CATS will be held on: October 10, 1992

11:00 AM Hardware Workshop
 2:00 PM General Meeting

At: New Carrollton Public Library 7414 Riverdale Road (Hwy 410), New Carrollton, MD

IF YOU ARE NOT A MEMBER OF CATS. THIS IS THE ONLY ISSUE YOU WILL RECEIVE

Printer Wringer Outer

By Barry Washington

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100 REMark >>> P R I N T E R <<<
110 REMark >> W R I N G E R <<
120 REMark >> O U T E R <<
130 REMark By Barry Washington, 8/92
140 REMark ===== FOR PANASONIC PRINTER MODEL KX-P2
123 (24 PIN) =====
150 REMark ===== EMULATES EPSON LQ-860 and IBM Pro-Printer
X24E =====
160 REMark ===== PROGRAM TO TEST PRINTER RESPONSE TO PUBLIS
HED CONTROL CODES ==
170 TK2_EXT
180 POKE_W 163976,-256
190 WINDOW 512,201,0,0:BORDER 5,2,6:PAPER 4:INK 0:CLS:CLS #0
200 CSIZE 3,1:AT 0,2:PRINT: "EPSON LQ-860 CONTROL CODES":CS
IZE 0,0
210 INK 0:AT 2,5:PRINT"=====
=====
220 AT 4,5:PRINT:"A. DOUBLE HIGH PRINT":AT 4,32:PRINT:"B. DO
UBLE WIDE PRINT":AT 4,59:PRINT:"C. ROMAN FONT":PRINT
230 AT 5,5:PRINT:"D. SUPERSCRIPT":AT 5,32:PRINT:"E. SUBSCRIP
T":AT 5,59:PRINT:"F. CONDENSED"
240 AT 6,5:PRINT:"G. SKIP PERFS.":AT 6,32:PRINT:"H. SCORE":A
T 6,59:PRINT:"I. PRINT QUALITY"
250 AT 7,5:PRINT:"J. ELITE":AT 7,32:PRINT:"K. PICA":AT 7,59:P
RINT:"L. MICRON":
260 AT 8,5:PRINT:"M. ITALIC":AT 8,32:PRINT:"N. PROP. SPACING"
:AT 8,59:PRINT:"O. FONT STYLE"
270 AT 9,5:PRINT:"P. EMPHASIZED":AT 9,32:PRINT:"Q. DOUBLE ST
RIKE":AT 9,59:PRINT:"R. UNDERLINE"
280 AT 10,5:PRINT:"S. OUTLINE/SHADOW":AT 10,32:PRINT:"T. WOR
D PROCESSING":AT 10,59:PRINT:"U. LEFT MARGIN SET"
290 AT 11,5:PRINT:"V. RIGHT MARGIN SET":AT 12,32:INK 2:PAPER
7:PRINT "X. RELEASE PREVIOUSLY SET CODES "
300 AT 14,1:INK 2:PAPER 7:PRINT:"ENTER LETTER OF YOUR CHOICE
":AT 18,1:PRINT "HIT SPACE BAR AFTER TASK IS PRINTED TO CLE
AR LOWER WINDOW "
310 STOP
320 REMark *** DOUBLE HIGH PRINT ***
330 Define PROCedure A
340 CLS #0:PRINT #0,"DOUBLE - HIGH"
350 OPEN #3,seric:PRINT #3,CHR$(27);CHR$(11);CHR$(91);"DOUBL
E HIGH PRINT":CHR$(27);CHR$(119);CHR$(0):CLOSE #3
360 END Define
370 REMark *** DOUBLE WIDE PRINT ***
380 Define PROCedure B
390 CLS #0: PRINT #0,"DOUBLE - WIDE"
400 OPEN #3,seric: PRINT #3,CHR$(27);CHR$(14);"DOUBLE WIDE P
RINT":CHR$(27);CHR$(87);CHR$(0):CLOSE #3
410 END Define
420 REMark *** ROMAN FONT ***
430 Define PROCedure C
440 CLS #0:PRINT #0;"ROMAN - FONT"
450 OPEN #3, seric:PRINT #3,CHR$(27);CHR$(107);CHR$(0);"ROMA
N FONT PRINT":CLOSE #3
460 END Define
470 REMark *** SUPERSCRIPT ***
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490 Define PROCedure D
490 CLS #0:PRINT #0,"SUPERSCRIPT"
500 OPEN #3,seric:PRINT #3,CHR$(27);CHR$(83);CHR$(0);"SUPERS
CRIPT":CLOSE #3
510 END Define
520 REMark *** SUBSCRIPT ***
530 Define PROCedure E
540 CLS #0:PRINT #0,"SUBSCRIPT"
550 OPEN #3,seric:PRINT #3,CHR$(27);CHR$(83);CHR$(1);"SUBSCR
IPT":CLOSE #3
560 END Define
570 REMark *** CONDENSED ***
580 Define PROCedure F
590 CLS #0:PRINT #0,"CONDENSED"
600 OPEN #3, seric:PRINT #3,CHR$(27);CHR$(15);"CONDENSED PRI
NT":CHR$(18):CLOSE #3
610 END Define
620 REMark *** PRINT QUALITY ***
630 Define PROCedure I
640 CLS #0:INPUT #0;" DRAFT=0, LQ=1, SLQ=2, (ENTER CHOIC
E) ";I$
650 IF I$="0" THEN LET Q$="DRAFT"
660 IF I$="1" THEN LET Q$="LQ"
670 IF I$="2" THEN LET Q$="SLQ"
680 OPEN #3,seric: PRINT #3,CHR$(27);CHR$(120);I$;"PRT. QUAL
. TEST.... ";Q$;LET Q$="" :CLOSE #3
690 END Define
700 REMark *** ELITE SIZE ***
710 Define PROCedure J
720 CLS #0: PRINT #3;"ELITE SIZE"
730 OPEN #3,seric: PRINT #3,CHR$(27);CHR$(77);"ELITE SIZE TE
ST":CLOSE #3
740 END Define
750 REMark *** PICA SIZE ***
760 Define PROCedure K
770 CLS #0:PRINT #0;"PICA SIZE"
780 OPEN #3,seric: PRINT #3,CHR$(27);CHR$(80);"PICA SIZE TES
T":CLOSE #3
790 END Define
800 REMark *** MICRON SIZE ***
810 Define PROCedure L
820 CLS #0: PRINT #0;"MICRON SIZE"
830 OPEN #3,seric: PRINT #3,CHR$(27);CHR$(103);"MICRON SIZE
TEST":CLOSE #3
840 END Define
850 REMark *** ITALIC FONT ***
860 Define PROCedure M
870 CLS #0: PRINT #0;"ITALIC FONT"
880 OPEN #3,seric: PRINT #3,CHR$(27);CHR$(52);"ITALIC PRINT
TEST":CHR$(27);CHR$(53):CLOSE #3
890 END Define
900 REMark *** PROPORTIONAL SPACING ***
910 Define PROCedure N
920 CLS #0: PRINT #0;"PROPORTIONAL SPACING"
930 OPEN #3,seric: PRINT #3,CHR$(27);CHR$(112);CHR$(1);"PROP
ORTIONAL SPACING TEST":CHR$(27);CHR$(112);CHR$(0):CLOSE #3
940 END Define
950 REMark *** FONT STYLE ***
960 Define PROCedure O
970 CLS #0:INPUT #0;" 0=ROMAN, 1=SANS SERIF, 2=COURIER, 3=PR
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ESTIGE, 4=SCRIPT, 5=BOLD PS (ENTER CHOICE) *;ST
980 IF ST=0 THEN LET S$="ROMAN"
990 IF ST=1 THEN LET S$="SANS SERIF"
1000 IF ST=2 THEN LET S$="COURIER"
1010 IF ST=3 THEN LET S$="PRESTIGE"
1020 IF ST=4 THEN LET S$="SCRIPT"
1030 IF ST=5 THEN LET S$="BOLD PS"
1040 OPEN #3,seric: PRINT #3;CHR$(27);CHR$(107);CHR$(ST);"FO
NT STYLE SELECTION,... ";S$;LET S$="";CLOSE #3
1050 END DEFINE
1060 REMark *** EMPHASIZED ***
1070 DEFINE PROCEDURE P
1080 CLS #0: PRINT #0;"EMPHASIZED PRINT"
1090 OPEN #3,seric: PRINT #3;CHR$(27);CHR$(69);"EMPHASIZED P
RINT";CHR$(27);CHR$(70):CLOSE #3
1100 END DEFINE
1110 REMark *** DOUBLE STRIKE ***
1120 DEFINE PROCEDURE Q
1130 CLS #0: PRINT #0;"DOUBLE STRIKE PRINT"
1140 OPEN #3,seric: PRINT #3;CHR$(27);CHR$(71);"DOUBLE STRIKE
MODE";CHR$(27);CHR$(72):CLOSE #3
1150 END DEFINE
1160 REMark *** UNDERLINE ***
1170 DEFINE PROCEDURE R
1180 CLS #0: PRINT #0;"UNDERLINED PRINT"
1190 OPEN #3,seric: PRINT #3;CHR$(27);CHR$(45);CHR$(1);"UNDE
RLINE MODE";CHR$(27);CHR$(45);CHR$(0):CLOSE #3
1200 END DEFINE
1210 REMark *** OUTLINE/SHADOW **
1220 DEFINE PROCEDURE S
1230 INPUT #0;"1=OUTLINE, 2=SHADOW, 3=OUTLINE WITH SHADOW ";
OS
1240 IF OS=1 THEN LET S$="OUTLINE"
1250 IF OS=2 THEN LET S$="SHADOW"
1260 IF OS=3 THEN LET S$="OUTLINE & SHADOW"
1270 OPEN #3,seric: PRINT #3;CHR$(27);CHR$(113);OS;"OUTLINE/S
HADOW PRINT ";S$;CHR$(27);CHR$(113);CHR$(0):CLOSE #3
1280 END DEFINE
1290 REMark *** WORD PROCESSING MODE ***
1300 DEFINE PROCEDURE T
1310 INPUT #0;"CENTERING=1, RIGHT ALIGNMENT=2, JUSTIFICATION
=3, RELEASE=0 (ENTER CHOICE) ";T$
1320 OPEN #3,seric: PRINT #3;CHR$(27);CHR$(97);T$;"WORD PROC
ESSING MODE ";T$;CHR$(27);CHR$(97);CHR$(0):CLOSE #3
1330 END DEFINE
1340 REMark *** LEFT MARGIN SET ***
1350 DEFINE PROCEDURE U
1360 CLS #0: INPUT #0;"ENTER DESIRED NUMBER OF LEFT MARGIN S
PACES ";U$
1370 OPEN #3,seric: PRINT #3;CHR$(27);CHR$(108);U$;"LEFT MA
RGIN SET TO ";U$;" SPACES"
1380 END DEFINE
1390 REMark *** RIGHT MARGIN SET ***
1400 DEFINE PROCEDURE V
1410 INPUT #0;"ENTER DESIRED NUMBER OF RIGHT MARGIN SPACES (
FROM LEFT EDGE) ";V$
1420 OPEN #3,seric: PRINT #3;CHR$(27);CHR$(81);V$;"RIGHT MA
RGIN SET AT ";V$;" SPACES";CLOSE #3
1430 END DEFINE
1440 REMark *** SCORE ***
1450 DEFINE PROCEDURE H

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1460 CLS #0: INPUT #0;"UNDERLINE=1, STRIKETHROUGH=2, OVERSCOR
E=3 (ENTER YOUR CHOICE) ";WS
1470 IF WS=1 THEN LET W$="UNDERLINE"
1480 IF WS=2 THEN LET W$="STRIKETHROUGH"
1490 IF WS=3 THEN LET W$="OVERSCORE"
1500 CLS #0: INPUT #0;"SINGLE CONTINUOUS LINE =1, DOUBLE CONT
INUOUS LINES=2, SINGLE BROKEN LINE=5, DOUBLE BROKEN LINES=6,
";WS2
1510 IF WS2=1 THEN LET W2$="SINGLE CONTINUOUS LINE"
1520 IF WS2=2 THEN LET W2$="DOUBLE CONTINUOUS LINES"
1530 IF WS2=5 THEN LET W2$="SINGLE BROKEN LINE"
1540 IF WS2=6 THEN LET W2$="DOUBLE BROKEN LINES"
1550 OPEN #3,seric: PRINT #3;CHR$(27);CHR$(40);CHR$(45);CHR
$(3);CHR$(0);CHR$(1);CHR$(WS);CHR$(WS2);"SCORE DEMO ";W$;" &
";W2$;CLOSE #3
1560 END DEFINE
1570 REMark *** SKIP PERFS ***
1580 DEFINE PROCEDURE G
1590 INPUT #0;"ENTER No. OF LINES TO BE SKIPPED AT THE BOTTO
M OF THE PAGE ABOVE THE PERFS ";X$
1600 OPEN #3,seric: PRINT #3;CHR$(27);CHR$(78);X$;"NUMBER O
F BLANK LINES AT PAGE BOTTOM IS SET TO ";X$;" LINES";CHR$(27
);CHR$(79):CLOSE #3
1610 END DEFINE
1620 REMark *** RELEASE ***
1630 DEFINE PROCEDURE X
1640 OPEN #3,seric: PRINT #3;CHR$(27);CHR$(84);CHR$(18);CHR$
(27);CHR$(112);CHR$(0);CHR$(27);CHR$(70);CHR$(27);CHR$(119);
CHR$(0);CHR$(27);CHR$(87);CHR$(0);CHR$(27);CHR$(72);CHR$(27)
;CHR$(45);CHR$(0);CHR$(27);CHR$(53):CLOSE #3
1650 REMark *** INITIALIZE PRINTER ***
1660 OPEN #3,seric: PRINT #3;CHR$(27)&"@":CLOSE #3
1670 CLS #0
1680 END DEFINE

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Dayton ComputerFest

By Tim Swenson

August 29th and 30th was the Dayton ComputerFest held in Dayton, Ohio. Your intrepid Editor and President (Tim and Mannie) made the 9 hour drive to Dayton to attend the Fest and meet other Sinclair Users.

This is the second year that the Dayton ComputerFest has been used as the yearly meeting place for Sinclair enthusiasts. In the past, Sinclair Fests have been put on, but they do take a lot of time and trouble to organize. Using the Fest as the annual get-together saves this overhead and provides an additional draw, the Fest itself.

This year only one Sinclair vendor, Mechanical Affinity, attended the Fest. Mechanical

Affinity is Frank Davis and Paul Holmgren. Frank Davis, with his wife Carol, is the editor/publisher of Update Magazine, the quarterly Sinclair publication. Sharps was there, but did not carry an Sinclair items. I'm not too sure where Mark setup, since I went through the whole place and did not see him.

Mechanical Affinity has most of their line entire line available at the Fest. Having heard that the price of a Z88 had dropped down to \$200, I waited until the Fest to pick one up. I'll be playing with it soon, so expect some articles. This was the only computer I brought home, much to my wife's pleasure. We did pick up 1000 blank disks that Herb was putting together a group buy. Since we were there, we saved a few cents per disk on shipping. There were a few older systems for sale, but there was no "tail-gating" as there is at HamFests.

The Fest was composed of four rooms. The first being reserved for those vendors hawking the most recent wares (386's and 486's). The other rooms were interspersed with Shareware vendors, User Groups, vendors carrying stuff for other computers (non-MS-DOS), and those carrying "old" stuff.

Don Lamber of ZXir QLive Alive! had a booth set up. The SMUG group also had a boot set up and selling a few items. Gary Ganger of the local Dayton Sinclair group, attended, but in his position with the Dayton MicroComputer Association (DMA), who put on the Fest. Gary is also involved with a local Forth group and gave a presentation on Forth. Other groups, like ours, were represented, but did not have a table. I hope to have a complete list of all who attended from Don Lambert. Don had a sign-up list for all Sinclair people.

Other people that I can remember are: Toby Radloff and Doug Gillespie of the Cincinnati group, Don Waltermann and John Impellizzeri of MI, Dave Bennet of PA, and Bill Pedersen of WIDJUP. I may have

missed a few I met there, plus I'm sure I've misspelled a few last names.

After the Fest on Saturday night, all of those Sinclair people interested gathered at Paul Holgren's and Frank Davis's hotel rooms to decide where to go for dinner. The time before, during, and after was well spent meeting and talking with people that I have heard about, but have never met, and some that I have not seen for a few years.

Mannie and I did not stay and attend the Fest on Sunday. We spent Sunday on the road home. Mannie had endless stories about his years spent doing geodesic surveys around the world (yes, Mannie, I did listen :-). All in all, It was a good time.

Meeting Notes

By Hank Dickson

President **MANNIE** **QUINTERO** warmly welcomed what he calls his "core group" of about ten home-computing enthusiasts who gathered for the first CATS meeting of the fall (chronological fall---not meteorological fall).

For the meeting year beginning in November, some discussion was held as to whether to request New Carrollton's large conference room, its small conference room, or both. It was left to the discretion of Arrangements Liaison **JOE MILLER** to submit a request to the library system that is both reasonable and prudent. User fees for the meeting rooms are going to happen soon, according to Joe.

Some thought was given to acquiring an "800" telephone number for CATS. Nothing positive was decided, however. Parenthetically, the "800" area code celebrated its' 25th anniversary this past summer. (Why has it taken us so long to catch up?)

The emulator/extricator involving 2068's and QL's has arrived from the Netherlands and will be demonstrated soon to the group.

The CATS bulletin board (BBS) is still on the air with surviving pieces of hardware. Recently, more people seem to be calling from distant points. Maybe they have expense-account telephone bills, or maybe the CATS BBS has something which meets their needs!

A special initiative was urged to contact TOM BENT to assure him that---if his schedule permits---he will be the prize guest at the October (anniversary) meeting. RUTH FEGLEY said she would try to make an initial effort in this regard.

Searching the traces for past presidents of CATS led to general information on the whereabouts of the following individuals:

BILL BARNHART
NED BEELER
JOHN CONGER
CHARLES & CORA DICKSON
RUTH FEGLEY
MARK FISHER
DUANE PARKER
MANNIE QUINTERO
PHIL RUSSO
JIM WALLACE

Special invitations to the tenth anniversary celebration will be extended to VERNON SMITH, one of our prize-winning newsletter editors, and JULES GESANG, Sinclair hardware impressario extraordinaire.

RUTH FEGLEY showed off an amazing publication originating in Canada which uses only the TS-1000 and related Sinclair technology for producing both its text and graphics. It is real proof of what can be done using patience and resourcefulness with the little Sinclair machine.

MARK FISHER said he would have an appropriately updated version

of his machine-language QUACK program ready to demonstrate at the October anniversary meeting.

An excellent main presentation was then given by N/L Editor TIM SWENSON. He introduced the group to "QDOS Jobs" and how to monitor and control the multitasking abilities of the little QL.

An excellent audio cassette recording was made of all his remarks. They will be transcribed, edited, and published in a forthcoming issue of the CATS N/L.

A Short History of Mechanized Logic: A Memoir

By Mark Fisher

It all started with the Greeks, using the sand as an image-processor. Shortly after that, it was claimed by the Romans - almost every cowherd carried a portable calculator with him (or her). Since these devices amounted to notched sticks, this was not a big stretch of technology.

The next big advance occurred with the discovery of logarithms by some French guy. The application of this concept brought us the slide rule, which is where I came into the picture.

When I was a kid, slide rules were a big deal. You could have cheap plastic ones that would stick, high tech aluminum ones in low-glare yellow, or groovy ivory and bamboo versions in their own scabbard (preferably encrusted with dirt). They all were equally accurate (not), but they would make the difference between the true nerds and the wanna-be's.

(Dum dum Dum dum Dum dum) But there was another possibility on the horizon. After all, ENIAC could give answers in digits - surely something would arrive to provide answers in numbers for those of us not possessed of a defense-scale budget. There

were hints: Galaxy magazine had ads in the back for \$10.00 computers and articles about psi circuits that worked only because they had been drawn on paper; but closer perusal of the ads revealed the "computer" to be cardboard and the psi circuits to be refugees from the Scientology ads in the same magazine.

Reality was a little slower. Even in the early seventies, "real" programming was performed by stacks of Hollerith cards (ever drop one of those stacks?), while the only computing device non-acolytes (i.e. me) were allowed near were toaster-oven sized calculators weighing 40 pounds that could (gosh) do square roots (Ahhhh....!).

Apple and Radio Shack broke the mainframe stranglehold on computation, but only for the free-spending techno-jock crowd. There was still no equivalent to that plastic slide rule for the wanna-be's.

And then, little ads in the back of Popular Mechanics started showing up. "Build your own computer for only \$250.00!" Further perusal of the ZX-80 ads revealed something more substantial than the Galaxy cardboard marvels, but \$250.00 Well, not quite yet, thanks. But more ads appeared; \$200.00, \$150.00... Hmmm...

And finally, Timex hit the news (along with Commodore). Now the company that could take a licking and keep on ticking thought this was a good enough product to stand behind. And they were everywhere - from Rothmans Drug Store to for-real computer stores. And they were getting cheaper; \$189, \$129.95, \$119.95... At \$89.95, I bit. In looking over the product, it produced an industry standard 24 lines of text, admittedly only 32 characters, but that was a lot better than the 20 character competition.

I bought that TS-1000, and it proved to be more than I anticipated. In addition to being a

capable and accurate calculator, it was accompanied with a literate and complete owners manual, complete with hints of further unexplored capacities (machine code). The manual had no doubt been honed from the kit-building days, and was an important part of the picture.

The manual led to another action. The TS-1000 may have looked like a doorstop, but there was obviously a LOT there. I was going to need help. A newspaper listing led me to a meeting of PGZUG; in a large school cafeteria, a cheerful, loud and various agglomeration of folks that had for hundreds of different reasons found themselves owners of Sinclair and Timex products. I was suspicious - somebody here must be selling something, I thought, but as the meeting progressed I gradually relaxed. In the end, I found the meeting helpful - I don't remember now exactly what I learned, but I showed up for the second meeting, filled with ideas about the possibilities this machine offered.

A lot of the hundreds dropped out - either to other computers with more fully packaged implementations or to other activities. More than a few have died - this has always been an attractive activity for retired engineers, repairmen, etc., and the average age of a CATS member has always been above average. (In at least one case I've benefited by this - John Conger sold me his motorcycle when he turned 75.) Even our life blood - the Timex-Sinclair partnership itself, has died.

But through the years, as the machines, the members, and the programs have matured, there has been a steady focus of interested, productive minds available to meet, ask, and show off what they've thought of lately.

Spectator - A Review

By Tim Swenson

Spectator is a Spectrum emulator for the QL. It is designed to emulate a 48K Spectrum with ZX Interface 1. Spectator is shareware program written by Carlo Delhez of the Netherlands.

Most of my review is based on reading the documentation that came with the program, plus some minimal testing of the program itself. Since I don't have any Spectrum programs on disk or a cassette interface for the QL, I am not able to try any commercial Spectrum programs.

The first thing I have to say about Spectator is SPEED. On a regular QL, Spectator runs at about 8% of a Spectrum. On a Gold Card QL, it goes as fast as 30% of a Spectrum. This is comes from the fact that all software emulators are inherently slow.

Spectator fully emulates the Spectrum feel with the look of the screen and the keyboard. Hit the letter J and you get LOAD on the screen. For those that have not memorized the Spectrum keyboard layout, there is a help screen available (this is the best looking part of Spectator).

Spectator makes the QL disk drive look like the cassette interface. If you SAVE "myprogram", the program will be saved to FLPl SPT_0_myprogram (SPT stands for Spectrum Tape). You can also save DATA, CODE, and SCREEN\$. Spectator supports ZX Interface 1 microdrives, but only emulated on disk. There is no way for Spectator to read a Spectrum cartridge on the QL microdrive.

Spectator allows the serial port on the QL to look like the serial port on the ZX Interface 1. Using the serial port, you can send

text to a printer or send/receive binary data. Not knowing the ZX Interface 1, I can't really test this out.

There are a number of utilities that come with Spectator. ddConvert.exe will convert files from a Disciple Disc to SPT files. P2SPT.exe will convert a P-file to a number of SPT-files (I have no idea what a P-file is).

The documentation's audience is a cross between the end-user and the techie. It is about 10 pages and does cover a lot of information.

I don't know if I have a need to use Spectator. It's really too slow to do more than just play around with the Spectrum. It might be more workable with a Gold Card. If you are a dedicated Spectrum fan, then it gives you more to play with. I guess it's just sort of neat to have a program like this. A lot of work has gone into this program and it shows. But, I don't now if it is worth the \$25 to register it. You may not use it enough to justify the cost.

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